

7. (cancelled)

8. (cancelled)

9. (cancelled)

10 10. (cancelled)

11. (cancelled)

12. (new) A web-based system for facilitating diagnosis of medical symptoms

comprising:

15 (a) an automated database that is a real-time, web-based system that includes statistically accrued data that is input from multiple sources via a common web-based system template, the common web-based system template providing a medium for entering data into the database that includes actual diagnoses and patient symptoms and information from patient populations, and further, the common template being used to generate a matrix that includes a plurality of possible post-test diagnostic outcomes, each outcome indicating a possible disease and probability for the disease, and further, reporting the possible post-test outcomes to a user as a list of diagnostic probabilities ranked from the most likely to the least likely of possible diagnoses for a patient under examination; with

20 (b) each possible post-test outcome of the plurality of possible post-test diagnostic outcomes in the matrix being generated from an array of mathematical factors that are based on patient symptoms and information, with one of the factors being a pre-test odds factor, and with each of the other factors in the array being input as an independent variable that is produced from answers to individual patient questions or results from diagnostic tests for that patient, and

30 indicates the likelihood of a post-test diagnostic outcome based on past data
entered via the common web-based template, and wherein the factors in the array
are multiplied together to produce the possible post-test diagnostic outcome that
indicates a possible disease and probability for the disease; and still further;
(c) an independent variable is generated for each array for each possible post-
35 test outcome in the matrix nearly simultaneously in response to each patient
answer or test result.

13. (new) The system of claim 12, wherein the independent variable that is produced
from answers to individual patient questions or results from diagnostic tests is generated
by creating a statistical likelihood ratio that results in a mathematical likelihood ratio
40 factor, the likelihood ratio factor being multiplied to the pre-test odds factor so that the
likelihood ratio either increases or decreases the value of the pre-test odds factor
depending on the value of the likelihood ratio factor.

14. (new) The system of claim 12, wherein the common template is used to update
the statistically-accrued data in the web-based system following generation of the matrix
45 that includes the plurality of post-test diagnostic test outcomes.

15. (new) The system of claim 12, wherein the plurality of possible post-test
diagnostic outcomes are reported as ranked probabilities.